



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,326	03/13/2000	Martin Morris	WIDC-005/00US	7223

7590 05/07/2003  
Cooley Godward LLP  
Attention Patent Group  
Five Palo Alto Square 4th Floor  
3000 El Camino Real  
Palo Alto, CA 94306-2155

EXAMINER

SWICKHAMER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
----------	--------------

2697

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/524,326

Applicant(s)

MORRIS, MARTIN

Examiner

Christopher M Swickhamer

Art Unit

2697



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5-9. 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: '140' and '180' in figure 3. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

- This list is not inclusive, the application must be checked to ensure each reference character is referred to and uniquely appears in the specification and the drawings.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 5 and 6 recite the limitation "said second slave unit" in line 31, page 12, and line 2, page 13. There is insufficient antecedent basis for this limitation in these claims.

- Claim 6 recites the limitation "said second extended address" in line 3, page 13. There is insufficient antecedent basis for this limitation in these claims.

- The claims will be examined changing "said" to "a."

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Aiello (US 2002/0018458). Referring to Claim 1, AIELLO discloses a method for communicating within a system including a master unit and one or more slave units (Fig. 1), said method comprising the steps of: Using the command slot to register a slave unit (assigning a member address to a first slave unit, paragraph [0023], [0077]), said command slot for registration (member address) corresponding to a selected time slot of a plurality of time slots defined by a system clock (Fig. 3a, 3b, paragraph [0026]), said time slots repeating in cycles; assigning to said first slave unit a data slot (first extended address) associated with an occurrence of said selected time slot within at least a selected one of said cycles; and transmitting information from said first slave unit to said master unit during said occurrence of said selected time slot (paragraph [0023]).

- Referring to Claim 2, AIELLO discloses the method of claim 1 further including the step of registering (assigning to) a second slave unit in the command slot (said member address) and a second data slot (extended address) associated with a different occurrence of said selected time slot within one or more of said cycles, said second slave unit being disposed to transmit information during said different occurrence of said selected time slot (paragraph [0023], [0077]).

- Referring to Claim 3, AIELLO discloses the method of claim 2 further including the step of determining whether less than a maximum permitted number of said slave units have been registered (assigned to said member address, Fig. 4, inherently only a certain number of time slots are available to be assigned in each frame), wherein said maximum permitted number of slave units being determined by performing a division operation in which a bandwidth associated with the data slots of the frame (said member address) is divided by a bandwidth of each data slot (allocated to said first slave unit), said maximum permitted number of slave units being no greater than a quotient of said division operation, which is the number of time slots in the frame (paragraph [0023]).

- Referring to Claim 4, AIELLO discloses the method of claim 1 further including the step of polling said first slave unit during a command slot (one of said plurality of time slots) immediately preceding said occurrence of the assigned time slot (of said selected time slot, paragraph [0082]).

- Referring to Claim 5, AIELLO discloses the method of claim 4 further including the step of polling said second slave unit during a command slot (one of said plurality of time slots) immediately preceding said different occurrence of the assigned time slot (said selected time slot, paragraph [0082]).

- Referring to Claim 6, AIELLO discloses the method of claim 1 further including the step of synchronizing said master unit, said first slave unit and said second slave unit to said system clock, said first data slot (extended address) and said second data slot (extended address) corresponding to first and second states, such as a '1' or '0,' of said system clock (paragraph [0026]).

- Referring to Claim 7, AIELLO discloses the method of claim 1 wherein said step of registering a slave unit (assigning a member address) includes the step of determining whether a bandwidth associated with a data slot (extended addresses) corresponding to said available bandwidth in the frame (member address) is no less than a desired bandwidth of said first slave unit (paragraph [0023]). The master device can assign one or more time slots, and can also deny access to the time slots if there are no available.

- Referring to Claim 8, AIELLO discloses the method of claim 1 further including the step of registering (assigning a second member address) a second slave unit (paragraph [0023], [0073]), said second registration (member address) corresponding to a different data slot (selected time slot) of said plurality of time slots, said second slave being disposed to transmit information during each occurrence of said different selected time slot (paragraph [0023]).

- Referring to Claim 9, AIELLO discloses the method of claim 8 further including the step of registering (assigning), to a third slave unit, said first registration time slot (member address, such as when a device goes offline, paragraph [0077]-[0079]) and a second data slot (extended address) associated with a different occurrence of said selected time slot within one or more of said cycles, said third slave unit being disposed to transmit information during said different occurrence of said selected time slot (paragraph [0023], 0073)).

- Referring to Claim 10, AIELLO discloses the method of claim 8 further including the step of polling said first slave unit during a command slot (one of said plurality of time slots) immediately preceding said occurrence of said selected time slot, and polling said second slave unit during a command slot (the one of said plurality of time slots) immediately preceding said different selected time slot (paragraph [0082]).

- Referring to Claim 11, AIELLO discloses a communication system in which a sequence of time slots repeats in cycles (such as TDMA, Fig. 4), said communication system comprising: a first slave unit; and a master unit (Fig. 1), said master unit including: means for registering (assigning a member address) to said first slave unit (paragraph [0023]), said command slot for registration (member address) corresponding to a selected one of said sequence of time slots (paragraph [0023]); means for assigning to said first slave unit a data slot (first extended address) associated with an occurrence of said selected one of said sequence of time slots within one or more of said cycles, said first slave unit being disposed to transmit information during said occurrence of said selected one of said sequence of time slots (paragraph [0023]).

- Referring to Claim 12, AIELLO discloses the communication system of claim 11 further including a second slave unit; said master unit including means for registering (assigning) to said second slave unit in said command slot (said member address) and a second data slot (extended address) associated with a different occurrence of said selected one of said sequence of time slots within one or more of said cycles, said second slave unit being disposed to transmit information during said different occurrence of said selected one of said sequence of time slots (paragraph [0023], [0073], [0077]).

- Referring to Claim 13, AIELLO discloses the communication system of claim 11 further including a second slave unit, said master unit including means for registering (assigning a second member address to) said second slave unit (this would happen when a device went offline, and then came back online [0077]-[0079]), said second registration (member address) corresponding to a different data slot (different selected time slot) of said sequence of time slots,

Art Unit: 2697

said second slave unit being disposed to transmit information during each occurrence of said different selected time slot (paragraph [0023]).

- Referring to Claim 14, AIELLO discloses a communication system in which a master unit communicates with one or more slave units during a sequence of time slots repeating in cycles (Fig. 1, 4, paragraph [0023]), said master unit comprising: means for polling a first slave unit (paragraph [0082]); means for registering (assigning a member address to, paragraph (0077)) said first slave unit, said registration (member address) corresponding to a command slot (selected one of) in said sequence of time slots (paragraph [0076]); and means for assigning to said first slave unit a first data slot (extended address) associated with an occurrence of said selected one of said sequence of time slots within one or more of said cycles, said first slave unit being disposed to transmit information during said occurrence of said selected one of said sequence of time slots (paragraph [0023]).

- Referring to Claim 15, AIELLO discloses the master unit of claim 14 further including means for registering (assigning to) a second slave unit in the command slot (said member address) and a second data slot (extended address) associated with a different occurrence of said selected one of said sequence of time slots within one or more of said cycles wherein said second slave unit is disposed to transmit information during each occurrence of said selected one of said sequence of time slots (paragraph [0023]).

- Referring to Claim 16, AIELLO discloses the master unit of claim 14 further including means for reregistering (assigning a second member address to) a second slave unit, said second registration (member address) corresponding to a different data slot (selected time slot) of said sequence of time slots wherein said second slave unit is disposed to transmit information during



Art Unit: 2697

each occurrence of said different selected time slot (paragraph [0023], [0073]). A device would be reregistered after the device went offline, then attempted to come back online when it had more data to transmit (paragraph [0077]-[0079]).

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Astrin, USP 6,026,082. *Wireless communication system.*
- Hulyalkar, USP 6,198,728. *Medium access control (MAC) protocol for wireless ATM.*
- Hodzic, USP 6,097,707. *Adaptive digital wireless communications network apparatus and process.*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M Swickhamer whose telephone number is (703) 306.4820. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (703) 305.4798. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872.9314 for regular communications and (703) 872.9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305.3900.

CMS  
April 21, 2003

  
RICKY NGO  
PRIMARY EXAMINER